

TECHNICAL DATASHEET Version S19

# AI-1500

Specifications AWS/ASME A5.20.79: E71-T11 AS/NZS 2576-2203-B7

# **Description and Applications**

**AI-1500** is a self-shielded welding wire for general purpose welding in all positions. Used on DC electrode negative, the wire has a smooth spray transfer even at low currents and arc voltages. Unlike gas-shielded wires where a short wire stick out of 10-15 mm is preferred, the self-shielded wires require a longer stick out of 25-50 mm. This is so that the heating effect on the wire will cause the gas shielding materials to decompose and provide the shield. Too short a stick out does not allow the shield to form and porosity can result.

**AI-1500** is designed to operate in spray transfer mode at lower amps and voltages than is usual for a particular wire diameter. The low heat input makes it particularly suited for fabrication of thin gauge materials.

**Applications**: All position single and multi-pass welding of mild and low alloy steel where impact properties are not required. Particularly suited for high speed welding of thin gauge material. General purpose welding in all positions where operators appeal is main consideration.

# **Typical Weldmetal Analysis**

С	Mn	Si	Al	Р	S	Fe
0.07	0.60	0.25	1.35	0.03	0.03	Bal

# Mechanical Properties of Weldmetal

	As Welded
Yield Strength	450MPa
UTS	520MPa
Elongation	23%

### **Welding Parameters**

Diameter (mm)	Current type	Amps	Stick-out (mm)
1.6	DC/AC	190	30-35
2.4	DC/AC	300	30-35

# Welding Positions

(1G, 1F) Downhand/flat position, (2F) Horizontal position, (2G) Horizontal vertical position, (4F) Horizontal overhead position, (4G) Overhead position, (3G, 3F, 5G up) Vertical Position Up & (3G, 3F, 5G down) Vertical position down.

### Disclaimer

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> ISO 9001 BUREAU VERITAS Certification

ALLOYS INTERNATIONAL PTY LTD

25 Raymond Road Laverton North Victoria 3026 Telephone: +61 3 8368 2222 | Facsimile: +61 3 8368 2200 ABN 53 112 712 286 sales@alloysint.com.au | www.alloysint.com.au